

REMARKS/ARGUMENTS

Claims 1 to 7, 20 to 25, 35 and 36 are pending. Claims 8 to 12 and 26 to 34 have been withdrawn. Claims 3 and 36 have been amended. Claims 16 to 19 have been withdrawn.

The Office Action stated: that Claims 13 to 19 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim; and that election was made without traverse in the reply filed on March 20, 2008.

The Office Action stated that applicants' election of Group I, Claims 1 to 7, 20 to 25, 35, and 36 in the reply filed on March 20, 2008 is acknowledged; and that, because applicants did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim 3 has been objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

The Office Action stated: that applicants are required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form; and that Claim 3 substantially repeats the limitation recited in Claim 2 from which it depends. Claim 3 has been amended to remove this problem.

This objection should be withdrawn.

The Office Action stated that the following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 36 has been rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention.

The Office Action stated: that Claim 36 contains the trademark/trade names Solvent Yellow and MarcroleX®; that, where a trademark or trade name is used in a claim as a limitation to

identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph; see *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982); that the claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product; that a trademark or trade name is used to identify a source of goods, and not the goods themselves; that, thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name; and that, in the present case, the trademark/trade name is used to identify/describe specific dyes and, accordingly, the identification/description is indefinite. Claim 36 where two trademarks (Solvent Yellow 202® and Macrolex®) were mentioned has been amended as indicated above by using generic names and should thus fulfill the requirements.

This rejection should be withdrawn.

Applicants have enclosed a copy of several papers/items that support their amendments of the subject trademarks.

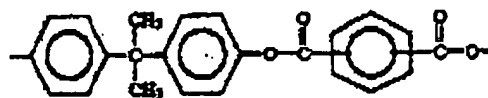
The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office Action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 to 6, 20 to 23, 25, and 35 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Takayama et al. (JP 60219899) in view of Kahn (U.S. Patent No. 4,746,472). Applicants traverse this rejection.

The Office Action stated: that Takayama et al. teaches a diaphragm for a speaker comprising comprising a polyarylate resin film (JPO Abstract); that Takayama et al. does not teach the polyarylate resin as having the claimed structure; that, however, Kahn teaches a thin

film polyarylate (5:13-21) with the formula



(3:10-15); that Takayama et al. and Kohn are combinable as they are concerned with the same field of endeavor, namely thin film polyarylate films; that It would have been obvious to a person having ordinary skill in the art at the time of invention to have used the resin of Kohn in the diaphragm of Takayama et al., and the motivation to do so would have been, as Kahn suggests, these resins are the most common and are commercially available (3:9-19); that Takayama at al. does not teach the film as being cast; that, however, Kohn teaches casting a thin polyarylate film (4:51-63); that it would have been obvious to a person having ordinary skill in the art at the time of invention to have used the casting method of Kohn to form the film of Takayama et al., and the motivation to do so would have been, as Kohn suggests, to form a film with few imperfections (4:64-5:5); and that Takayama et al. teaches the film thickness as being less than 100 μm (JPO Abstract). Applicants disagree with and traverse this statement.

Takayama et al., as acknowledged by the Examiner, does, however, not disclose the chemical structure of the polyarylate given by present formula I in Claim 1. In addition, the film (as also already acknowledged by the Examiner) in Takayama et al. is not cast. Still, the Examiner considers the documents combinable as they would relate to the same field of endeavour, namely polyarylate films. This field, however, appears to be much too broadly defined by the Examiner: First, the polyarylate structure 10 in Takayama et al. is only the basis for a polyester adhesive and then for an aluminium foil. Thus it is itself not considered as being sufficient as a speaker membrane. In addition, it is not manufactured by solvent casting and then thermoforming. Instead, it is directly produced by vacuum molding. Its form, further, is so that it has plural protrusions 10a and recessed parts 10b disposed in radial shape. Thus, the structure is quite complicated. Thus there would be no reason for a person ordinarily skilled in the art to make the different diaphragms of the invention which even can be used as loudspeaker diaphragms themselves. Second, Kohn deals with membranes for a very specific

purpose, namely ultrathin, voidfree, polyarylate, free-standing films with thicknesses of less than 400 angstrom (less than 40 nm), at least 50 nm or less (see column 1 last paragraph, and column 5, third paragraph). They are to be used in separatory (e.g. gas separation) and as drug release membranes and thus need to be sufficiently permeable (see column 2, lines 24 to 27, and column 5. lines 22 to 24». Essentially, these films are so thin that thermoforming is not practicable with them - it would lead to damages - and that they are not sufficiently stable for loudspeakers and the like. Thus, there use also has structural consequences and in addition requires a very specific process of manufacture, namely casting a drop onto water (col. 4 lines 51 to 63 cited by the Examiner). It is only stable on the casting surface, as mentioned in the same paragraph. No thermoforming is possible or mentioned. The person ordinarily skilled in the art would not take Kohn into consideration if he intends to manufacture new types of membranes useful for loudspeakers and the like, let alone be motivated to do so, because the films/membranes there fulfill totally different purposes and must have different properties from those needed in the present invention. The mere coincidence that polyarylates of the same formula as in the present invention are mentioned thus is not sufficient to establish lack of inventive step. There is no reason and also no motivation to combine the two documents, especially as Takayama et al. does not disclose simple diaphragms useful as such as loudspeaker membranes and the like - the complicatedly structured elements 10 there are only supports for an aluminium foil on a polyester adhesive, these together being stated to form the diaphragm. So there is no reason for a person ordinarily skilled in the art to consider making a diaphragm solely from a polyarylate film. Also, neither Takayama et al. nor Kohn mention a combination of solvent casting and thermoforming. The different production process is even more emphasized in new Claim 3, but already Claim 1 shows fundamental differences from both quoted documents regarding the production process alluded to. This is even more true for the process claims and the remaining claims. Therefore, it is kindly requested that the rejection of claims be re-considered and withdrawn.

Concerning Claims 5, 22 and 23, again Takayama et al. is cited to mention a resin film thickness of element 10 of 100 μm . While this is true, the structure 10 there is no diaphragm but only part of it, as explained in the last paragraph. Therefore, inventive step is deemed given even without the necessity to include a thickness, so that also Claims 5, 22 and 23 are considered non-obvious.

This rejection should be withdrawn.

Claim 36 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Takayama et al. (JP 60219899) in view of Kohn (U.S. Patent No. 4746,472) as applied to Claim 1 above, and further in view of van der Scheer et al. (U.S. Patent No. 4,556,530). Applicants traverse this rejection.

The Office Action stated that Takayama et al. and Kahn collectively teach the diaphragm of Claim 1 as shown above. Applicants traverse this statement for the above reasons.

The Office Action assert that Claim 36 is regarded as obvious in the Office Action over a combination of Takayama et al., Kohn and further Scheer et al. However, also Scheer only mentioned very thin, dense membranes for purposes of membrane permeation processes (see col. 1, lines 24 to 33. However, already due to its dependency on Claim 1 the invention in Claim 36 is deemed non-obvious as pointed out above. Thus it is directed on the same use as Kohn, though providing a different purpose, namely, very thin film production without using a solvent casting process onto a solid carrier - instead, a liquid carrier must be used (otherwise removal from the substrate of the very thin films would harm them). In addition, the surface active ingredients in Scheer are explicitly stated to remain in the organic solution (col. 3 lines 20 to 26) and are chemically distinct (being esters, while in the present invention only ethers are comprised). In contrast, the compounds used presently are stated to be water soluble. Thus, and given the specific structural requirements for diaphragms in the present invention, an ordinarily skilled person in the art would not consider the documents and the invention as claimed in Claim 36 is unobvious. In addition, Scheer is also not relevant to any other claims, as

there only specific three-dimensionally.

This rejection should be withdrawn.

Claims 7 and 24 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Takayama et al. (JP 60219899) in view of Kohn (U.S. Patent No. 4,746,472) as applied to Claims 5 and 6 above, and further in view of Ugaji et al. (U.S. Patent No. 4,281,223). Applicants traverse this rejection.

The Office Action stated that Takayama et al. and Kahn collectively teach the diaphragm of Claims 5 and 6 as shown above. Applicants traverse this statement for the above reasons

The Office Action stated: that Takayama et al. does not teach the diaphragm being used in one of the claimed devices; that, however, Ugaji et al, teaches using a diaphragm made from a resin film (2:633:7) in a loudspeaker or microphone (3:40~51); that Takayama et al. and Ugaji et al. are combinable as they are concerned with the same field of endeavor, namely, acoustic devices, made from resin film diaphragms; and that it would have been obvious to a person having ordinary skill in the art at the time of invention to have used the diaphragm of Takayama et al. in a microphone or loudspeaker as in Ugaji et al., and the motivation to do so would have been, as Ugaji et al. suggests, to provide a electro-acoustic transducer (1:8-21). Applicants disagree with this statement. Takayama et al. does not teach free elements 10 as membrane diaphragms as such, only discloses a complex structure for 10 and a complex diaphragm further including an adhesive layer and an aluminium foil. Kohn, on the other hand, teaches away from this as there only very thin films, obtainable only without thermoforming, are made for a totally different purpose. In addition, the Examiner quotes Ugaji et al. However, Ugaji et al. teaches away from the present invention: There only epoxy-modified and polyimide combination resin is used, and this is showing 3-dimensional cross-linking (see col. 9 last paragraph, where the importance of such crosslinking is emphasized, see also the continuation of this paragraph in column 10 (no contractions which would result if a linear polymer were used). This means that a thermoforming is not possible as a melting of the three-dimensionally cross-linked material is

not possible. Therefore, this document is not appropriately combined with the prior art and rather teaches away from the present invention.

This rejection should be withdrawn.

The Office Action stated: that applicants are advised that should Claim 2 be found allowable, Claim 3 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof; that, when two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim; and see MPEP § 706.03(k). Due to the amendment of Claim 3, the double patenting rejection is no longer applicable.

Reconsideration, reexamination and allowance of the claims are requested.

Respectfully submitted,

Sept. 22, 2008
Date

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|---|
| <p>CERTIFICATE OF MAILING</p> <p>I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on <u>Sept. 22, 2008</u>.</p> <p><u>Virgil H. Marsh</u> FISHER, CHRISTEN & SABOL 1120 20th Street, N.W. South Tower, Suite 750 Washington, D.C. 20036</p> |
|---|

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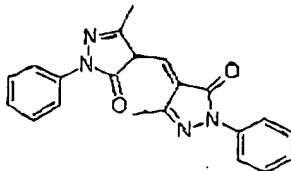
Solvent Yellow 93

[Correct/Edit](#)

Identification

Name Solvent Yellow 93

Synonyms C. I. 48160: 4-[(1,5-Dihydro-3-methyl-5-oxo-1-phenyl-4H-pyrazol-4-ylidene)methyl]-2,4-dihydro-5-methyl-2-phenyl-3H-pyrazol-3-one

Molecular
structure

(Image from chemblink)

Molecular formula $C_{21}H_{18}N_4O_2$

Molecular weight 358.40

CAS Registry Number 4702-90-3

Number

EINECS 225-184-1

Properties

Safety Data

| | |
|-----------------------|-------------------------|
| Hazard Symbols | Details |
| Risk Codes | Details |
| Safety Description | Details |
| Transport Information | |

Application

Application

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Suzhou Sunway Dyes & Chemical Co., Ltd.

Featured Product > Solvent Yellow 202



Sunway Dyes

Dyes and Pigments

Category:

Dyes and Pigments

Specification:

Solvent dyes

C.I. Solvent Yellow 16

The Equivalents: (BASF) Sudan Yellow 146

Description:

Solvent dyes

Azo- and Anthraquinone-dyes with good miscibility to various plastic materials, such as polyolefins/ps/ABS/PVC etc. This range is also good for coloring purpose for petroleum products as well as for oil & fat dyeing.

| Item | M.P. (°C) | P.H. | Solubility(mg/L) | | | | | | Fastness | | | |
|--------------------------|--------------|-------------|------------------|--------------|-----------------------|--------------|-------------|------|----------|------|------|--------|
| | | | Meth- anol | Eth- anol | Ethyl Ace- tate | Tol- uene | Xyl- ene | MEK | Light | Heat | Acid | Alkali |
| Solvent Yellow 202 | 181 | 6.5- 7.3 | 0.5% | 0.6% | - | 3.3% | 2.6% | 1.5% | 7 | A | A | A |

Solubility Test:

(1) Dissolve 20gm of Dye in 40ml of solvent stir thoroughly, seal the container tightly and left over night.

(2) Stir the above sample weight filter paper accurately before filtering the sample. Then put the residue and filter paper inside a thermostat with 50 temperature until all the liquid evaporated.

(3) Weight the residue(X) Total weight-weight of filter paper:

- Determine the Solubility by calculation:
- $20/40 \times 1000 = \text{Solubility (gm/l)}$

Fastness:

- (1) Light resistance: Used standard Blue Scale as comparison standard
- (2) Heat Resistance: Automatic Constant Temperature Dryer at 180°C for 10 hours.
- (3) Acid Resistance: Immerse in 1% H₂SO₄ solution for 24 hours.
- (4) Alkali Resistance: Immerse in 1% NaOH solution for 24 hours.
- (5) Standard symbols for test: A: good B: fair C: Poor

Use:

1. BRIEF INTRODUCTION

Higher plastic colorant are most suitable for various plastic materials coloring, with greater color strength, better fastness to heat, light, acid and alkali. This range is generally used in coloring domestic plastic materials, cop tube materials, fat dyeing, lacquers, inks and master batches dyeing. Some of them are suitable for dyeing chemicals fibre, such as dacron, nylon and cellulose acetate fibre.

2. APPLICATION

High plastic colorant are solvent dyes with good solubility and miscibility in organic solvents. This range can be used in the following materials alone as well as mixed in proportion:

- (PS) Polystyrene
- (HIPS) High Impact polystyrene
- (PC) Polycarbonate
- (UPVC) Rigid poly
- (PMMA) Polymethyl methacrylate
- (SAN) Styrene-acrylonitrile copolymer
- (SB) Styrene-butadiene copolymer
- (AS) Acrylonitrile-styrene copolymer
- (ABS) Acrylonitrile-butadiene-styrene copolymer
- (372) Styrene methyl acrylic acid copolymer
- (CA) Cellulose acetate
- (CP) Cellulose propylene

3.USAGE

The dye is dissolved in plastic in molecular-distribution. Before molding or preplasticizing, add dyes into plastic materials in proportion and stir thoroughly. The shade can be adjusted in demand. You can obtain transparency color in clear resin, or un-transparency color with titanium pigment. Use level:

- Transparency color around 0.02%-0.05%
- Un-transparency color around 0.1%

4.SPECIFICATIONS

- Heat fastness: 240-300°C
- Light fastness: 6-7 or 7-8
- Migration resistance: 3-4 or 4-5
- Coloring strength: 100%±3
- Moisture: 1% max
- Particular size: 60 meshes (passed)

Member's Contact Information

Contact Person: ***

Company: Suzhou Sunway Dyes & Chemical Co., Ltd.
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Zip Code: 215128
Phone: 86-512-65275572, 65258334
Fax: 86-512-65253732
Http: www.sunwaydyes.com
Email: dvestuff@swdt.cn

ChemNet[®]

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SUDAN III

PRODUCT IDENTIFICATION

CAS NO 85-86-9
 EINECS NO. 201-638-4
 FORMULA $C_{22}H_{16}N_4O$
 MOL WT. 352.39

H.S. CODE

TOXICITY

SYNONYMS

Fat Ponceau G; Cerasin Red;

1-[4-(Phenylazo)phenylazo]-2-naphthol; C.I. 26100; D & C Red No.17; Oil Scarlet; Solvent Red 23; Sudan Red; Sudan Red III; Sudan V; Tony Red; Sudan Red B; Sudan G; Scarlet B;

DERIVATION

CLASSIFICATION

PRICE

| | |
|---------------|--|
| Sudan I | US\$6.50/kg CFR by sea for 500kgs US\$12.50/kg CFR by sea for 100kgs US\$85.50/kg CFR by air for 10kgs |
| Sudan II | US\$5.80/kg CFR by sea for 500kgs US\$11.50/kg CFR by sea for 100kgs US\$80.50/kg CFR by air for 10kgs |
| Sudan III | US\$5.50/kg CFR by sea for 500kgs US\$10.50/kg CFR by sea for 100kgs US\$90.50/kg CFR by air for 10kgs |
| Sudan IV | US\$5.40/kg CFR by sea for 500kgs US\$9.50/kg CFR by sea for 100kgs US\$80.50/kg CFR by air for 10kgs |
| Sudan Black B | US\$45.50/kg CFR by sea for 500kgs US\$80.50/kg CFR by sea for 100kgs US\$170.50/kg CFR by air for 10kgs |

PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE Reddish brown crystals

MELTING POINT 199 C

BOILING POINT

SPECIFIC GRAVITY

SOLUBILITY IN WATER Insoluble

AUTOIGNITION

pH

VAPOR DENSITY

NFPA RATINGS

AUTOIGNITION

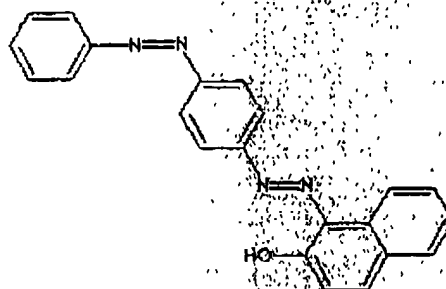
REFRACTIVE INDEX

FLASH POINT

STABILITY Stable under normal conditions.

APPLICATIONS

Sudan is a group of solvent dye, frequently called lysochrome (Lyso- means dissolving and -chrome means colour). In structural classification, sudan belongs to diazo dye. Azo colorant molecule can be described as aryl-N=N-R, where R is aryl, heteroaryl or $-CH=C(OH)-$. Solvent dyes are insoluble in water but soluble in nonpolar organic solvents and fats. It is usually used as a solution in an organic solvent. Azo structure solvent dyes are often responsible yellow-red color whereas anthraquinone structure solvent dyes tend to be green-blue. Some other structures for solvent dyes include heterocyclic rings, metal complex,



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pyrazolone, xanthene, and ketoamine. Solvent dyes do not ionise. Solvent dye, undergoing molecular rearrangement, is dissolved in the substrate. It colours and binds to the lipids resulting in showing colored regions. In industrial field, it is used in coloring oils, waxes, greases, fats, hydrocarbons derivatives, polishes, oily insecticides, and acrylic emulsions. Sudans are used for demonstrating fats, triglycerides and lipoproteins present in tissues as biological stains.

- Sudan I [Solvent Orange R, CAS #: 842-07-9]; a yellow lysochrome; C.I. solvent yellow 14; carcinogen suspect. Chemically 1-phenylazo-2-naphthol.
- Sudan II [Solvent Orange 7, CAS #: 3118-97-6]; an orange lysochrome; C.I. Solvent Orange 7; carcinogen suspect. Chemical designation 1-(2,4-Dimethylphenylazo)-2-naphthol
- Sudan III [Sudan Red, CAS #: 85-86-9] A red lysochrome; C.I. Solvent Red 23; a stain for the demonstration of triglycerides and fats. Chemical designation 1-[4-(Phenylazo)phenylazo]-2-naphthol.
- Sudan IV [Scarlet Red, CAS #: 85-83-6] A scarlet red lysochrome; Solvent Red 24; a stain for the demonstration of triglycerides and fats. deeper stain than Sudan III, Chemical designation 1-[[2-methyl-4-[(2-methylphenyl)azo]phenyl]azo]-2-Naphthalenol
- Sudan Black B [CAS #: 4197-25-5], a black lysochrome; Solvent Black 3; a stain for the demonstration of fat vacuoles in bacterial cells. Cleared with xylol and counterstained with safranin. Chemical designation 2,3-Dihydro-2,2-dimethyl-6-[[4-(phenylazo)-1-naphthyl]azo]-1H-Perimidine.

SALES SPECIFICATION

APPEARANCE Reddish brown crystals
 DYE CONTENT 90.0% min
 ABSORPTION max 507(304) nm

TRANSPORTATION

PACKING

HAZARD CLASS

UN NO.

OTHER INFORMATION

Hazard Symbols: , Risk Phrases: , Safety Phrases: 22-24/25

SUDAN PRODUCTS

| Product | C.I. Name | C.I. No. | CAS No. |
|-------------------|-------------------|----------|------------|
| Sudan Yellow 1339 | | 10335 | 119-75-5 |
| Sudan Yellow R | Solvent Yellow 1 | 11000 | 60-09-3 |
| Sudan Red B | Solvent Red 25 | | 3176-79-2 |
| Sudan Yellow GG | Solvent Yellow 2 | 11020 | 60-11-7 |
| Scarlet Red | Solvent Red 24 | 26105 | 85-83-6 |
| Sudan III | Solvent Red 23 | 26100 | 85-86-9 |
| Fat Yellow B | Solvent Yellow 3 | 11160 | 97-56-3 |
| Sudan Green 4B | Solvent Green 3 | 61565 | 128-80-3 |
| Sudan Blue GA | Solvent Blue 11 | 61525 | 128-85-8 |
| Sudan I | Solvent Yellow 14 | 12055 | 842-07-9 |
| Sudan Red G | Solvent Red 1 | 12150 | 1229-55-6 |
| Sudan Orange G | Solvent Orange 1 | 11920 | 2051-85-6 |
| Sudan Yellow GGN | Solvent Yellow 56 | 11021 | 2481-94-9 |
| Sudan Red 2R | Pigment Red 40 | 12170 | 2653-64-7 |
| Sudan Red | Solvent Orange 7 | 12140 | 3118-97-6 |
| Sudan Black B | Solvent Black 3 | 26150 | 4197-25-5 |
| Sudan Yellow 3G | Solvent Yellow 16 | 12700 | 4314-14-1 |
| Fat red 7B | Solvent Red 19 | 26050 | 6368-72-5 |
| Sudan Blue B | Solvent Blue 63 | 61520 | 6488-50-0 |
| Fat Brown RR | Solvent Brown 1 | 11285 | 8416-57-5 |
| Sudan Blue | | | 6994-46-3 |
| Sudan Black | | | 56926-93-1 |

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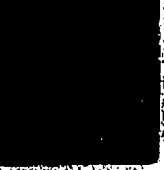


**PRODUCTS**

CHINA CHEM (QINGDAO) CO., LTD.

FULL RANGE OF SOLVENT PIGMENT (2) :

| Product Name | C.I.NO | Foreign Similar Product | Color sheet (A) | Color sheet(B) (0.4%Tio2) |
|-----------------------|--------------------|-----------------------------|------------------------------------|------------------------------|
| Transparent Yellow R | Solvent Yellow 176 | Solvapern Yellow G (HST) | Transparent Yellow R 0.05% | Transparent Yellow R |
| Transparent Yellow 3R | Solvent Yellow 189 | Keyplast Yellow 2SK (KEY) | Transparent Yellow 3R 0.05% | Transparent Yellow 3R |
| Transparent Orange 3G | Solvent Orange 60 | Macrolex Orange 3G (DyStar) | Transparent Orange 3G 0.05% | Transparent Orange 3G |
| Transparent Orange R | Solvent Orange 107 | Macrolex Orange R (DyStar) | Transparent Orange | Transparent Orange R |

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| | | | | |
|--------------------|-----------------|------------------------------|--|--|
| | | | R 0.05% | |
| Transparent Red 5B | Solvent Red 52 | Macrolex Red 5B (DyStar) |  Transparent Red 5B 0.025% |  Transparent Red 5B |
| Transparent Red EG | Solvent Red 135 | Filester Red GA (CI) |  Transparent Red EG |  Transparent Red EG |
| Transparent Red R | Solvent Red 179 | Macrolex Red E2G (DyStar) |  Transparent Red R |  Transparent Red R (SOLVENT RED 43) |
| Transparent Red 2B | Solvent Red 207 | Keyplast Red M6B (KEY) |  Transparent Red 2B |  Transparent Red 2B |

1 2 3 4

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SOLVENT ORANGE COLOR

SOLVENT
ORANGE
COLOR[Solvent Yellow color](#) | [Solvent Orange color](#) | [Solvent Red color](#) |[Solvent Violet color](#) | [Solvent Blue color](#) | [Other Solvent dyes](#)

| | | |
|-------------------------------|--------------------|-----------------|
| Solvent Oil Orange RC | Solvent Orange 2 | CAS#2646-17-5 |
| Solvent Chrysoidine Base | Solvent Orange 3 | CAS#495-45-5 |
| Solvent Oil Orange 45 | Solvent Orange 45 | CAS#13011-62-6 |
| Solvent Oil Orange KRV | Solvent Orange 54 | CAS#12237-30-8 |
| Solvent Oil Orange 3G | Solvent Orange 60 | CAS#61969-47-9 |
| Solvent Oil Orange R | Solvent Orange 62 | CAS#52256-37-8 |
| Solvent Transparent Orange 2G | Solvent Orange 63 | CAS#16294-75-0 |
| Solvent Oil Orange G | Solvent Orange 86 | CAS#81-64-1 |
| Solvent Oil Orange YR | Solvent Orange 99 | |
| Solvent Transparent Orange FR | Solvent Orange 105 | CAS#31482-56-1 |
| Solvent Transparent Orange R | Solvent Orange 107 | CAS#185766-20-5 |

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Links

- [Solvent Yellow color](#)
- [Solvent Orange color](#)
- [Solvent Red color](#)
- [Solvent Violet color](#)
- [Solvent Blue color](#)
- [Other Solvent dyes](#)
- [Disperse Dye](#)
- [Acid Dye](#)
- [Solvent Dye](#)
- [Vat Dye](#)
- [Direct Dye](#)
- [Pigment](#)

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Manufacturer and Exporter of uv absorber, dye, solvent dyes, solvent yellow dye, solvent orange dye, solvent red dye, solvent violet dye, solvent blue dye, solvent green dye, solvent black, direct dye, vat dye, acid dye, pigments: Vat dye | Acid dye | UV absorber | Light stabilizer | Direct dye | Solvent dye | Pigment | Disperse dye | Vat dyes | Acid dyes